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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,220	12/28/2001	Michael R. Garrett	1662-51000 JMH (P00-3220)	9076
22879	7590	02/24/2006	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			NGUYEN BA, HOANG VU A	
			ART UNIT	PAPER NUMBER
			2192	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/034,220	Applicant(s) GARRETT ET AL.	
	Examiner Hoang-Vu A. Nguyen-Ba	Art Unit 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 and 31-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-26 and 31-34 is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. <u>2/2/06&2/3/06</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. This action is responsive to the amendment filed December 12, 2005.
2. Claims 1-26 and 31-34 are pending. Claims 1, 5, 9, 18, 21 and 31 are independent claims.

Response to Amendments

3. Per Applicants' request, Claims 1-5, 9 and 21 have been amended. Claims 27-30 were previously canceled.
4. Attorney for Applicants has been contacted via telephone on February 2, 2006 with notification of potential double patenting between instant claims and claims of U.S. Patent No. 5,887,169 to Lacombe and of U.S. Patent No. 5,964,875 to Autor and recommendation for amendments to the instant claims such as 1+3, 5+6, 18+20 and 31+34 to obviate a double patenting rejection and to place the application in condition for allowance.

Attorney for Applicants informed the examiner during a telephone call on February 2, 2006 that Applicants would like to have the opportunity to respond to an Office action with the double patenting rejection.

Response to Arguments

5. Applicants' arguments in the Remarks, filed concurrently with the aforementioned amendment, are persuasive. The rejections of Claims 1-8, 18-20 and 31-34 are therefore withdrawn.
6. The objection to Claims 9-17 and 21-26 is withdrawn in view of Applicants' amendments to these claims to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Double Patenting

7. The non-statutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper time wise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ 2d 2010 (Fed. Cir. 1993); *In re Long*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1993); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Voge*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.103(c) 1.321(c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.37(b).

8. Claims 1 and 5 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims (4, 10) and 1, respectively of U.S. Patent No. 5,887,169 to Lacombe.

Instant Claim 1	Patent Claim 4	Comments
A method comprising:	A method for performing function calls into a software	Since a BIOS comprising a plurality

	layer interposed between device drivers and hardware of a computer system, said method comprising:	of BIOS routines performs the same function of the patent's HAL (i.e., interface between hardware and operating system of a computer system), the patent's software layer is equivalent to one of or the first BIOS routine a plurality of BIOS routines of the instant claim
identifying with a unique identification number a first basic input/output system (BIOS) routine of a plurality of BIOS routines;	(a) searching a predetermined memory area to identify a signature associated with the software layer;	The patent's signature is an alternate designation for the instant unique identification number
correlating the unique identification number to at least a services number in a data table; and	(b) comparing the signature identified with a particular enhanced software layer to produce a	

	comparison result; (c) determining whether the particular enhanced software is present based on the comparison result;	
determining , by a BIOS calling program, a services number of the first BIOS routine based on the unique identification number from the data table	(d) obtaining dynamic entry point addresses associated with the particular enhanced software layer when the particular enhanced software layer is determined to be present; and	the patent's function calls into a software layer recited in the preamble is equivalent to the instant BIOS calling program; the patent's dynamic entry point address is equivalent to the instant services number
	(e) thereafter processing function calls using the dynamic entry point addresses to the particular enhanced layer as requested by the device drivers so as to access the hardware	

As shown in the table, patent claim 4 appears to anticipate instant claim 1 as patent claim 4 recites all the features (or at least equivalent features with equivalent functions) of instant claim 1, except that of a “data table” recited in instant claim 1. However, the function of the instant data table is deemed equivalent to that of the patent’s predetermined memory area shown in FIG. 5, step 506 (also see related text).

Instant Claim 1	Patent Claim 10	Comments
A method comprising:	A computer-implemented method for accessing additional routines in a hardware abstraction (HAL) of a computer program, said method comprising:	See above
	(a) issuing a request for execution of one of the additional functional routines in the HAL;	
identifying with a unique identification number a first basic input/output system (BIOS) routine of a plurality of BIOS routines;	(b) determining whether the HAL supports at least the one of the additional functional routines, said determining (b) including the operations of searching a predetermined area for a signature associated with	See above

	the HAL,	
correlating the unique identification number to at least a services number in a data table; and	comparing the signature identified by said searching with a predetermined signature associated with a HAL that supports at least the one of the functional routines, and	the patent's predetermined signature associated with a HAL that supports at least one functional routines is interpreted to be an alternate designation for the instant services number
Determining , by a BIOS calling program, a services number of the first BIOS routine based on the unique identification number from the data table	determining whether the HAL supports at least the one of the functional routines based on said comparing; and	See above
	(c) executing the one of the additional functional routines requested when said determining (b) determines that the HAL supports at least the one of the additional functional routines, and prevent executing the one of	

	the additional functional routines requested when said determining (b) determines that the HAL does not support at least the one of the additional functional routines.	
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As shown in the table, patent claim 10 appears to anticipate instant claim 1 as patent claim 4 recites all the features (or at least equivalent features with equivalent functions) of instant claim 1, except that of a “data table” recited in instant claim 1. However, the function of the instant data table is deemed equivalent to that of the patent’s predetermined memory area shown in FIG. 5, step 506 (also see related text).

Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of the invention recited in instant claim 1 appears to be an obvious variant of that recited in patent claims 4 and 10.

Instant claim 5	Patent claim 1	Comments
A computer system comprising: a central processing unit (CPU); a main memory array coupled to the CPU;	A system as for providing enhancements to a hardware abstraction layer (HAL) of an operating system used with a computer having	

	hardware , and said system comprising:	
a basic input/output system (BIOS) read only memory (ROM) coupled to the CPU, the BIOS ROM comprising a plurality of BIOS routines ; and	a HAL containing executable function calls and a HAL identifier , the executable function calls being addressed by a plurality of entry points, and the plurality of entry points includes a plurality of fixed entry points and a plurality of dynamic entry points;	
a data table stored within the BIOS ROM, and wherein the data table correlates a unique identification number for a single BIOS routine to a BIOS call services number for the single BIOS routine.	A data storage region for storing at least the HAL identifier and at least on of the dynamic entry points; a controller fro controlling ... determines whether the particular HAL identifier matches the HAL identifier stored in said data storage region, makes function calls to said HAL using fixed entry	

	points or the dynamic entry points ...	
	a device driver for accessing the hardware via said HAL, said device driver selects a particular HAL identifier	

As shown in the table, patent claim 1 appears to anticipate instant claim 5 as patent claim 1 recites all the features (or at least equivalent features with equivalent functions) of instant claim 5.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of the invention recited in instant claim 5 appears to be an obvious variant of that recited in patent claim 1.

9. Claim 1 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claim 7 of U.S. Patent No. 5,964,875 to Autor et al. ("Autor").

Instant claim 1	Patent claim 7	Comments
A method comprising:	A method for monitoring a computer system having a plurality of hardware	

	<p>features and a hardware resources table</p> <p>containing predetermined information on the hardware resources of the computer system, comprising the operations of:</p>	
	<p>(a) receiving a service request by a particular hardware feature of the computer system;</p>	
<p>identifying with a unique identification number a first basic input/output system (BIOS) routine of a plurality of BIOS routines;</p> <p>correlating the unique identification number to at least a services number in a data table; and</p>	<p>(b) retrieving locations of at least one of presence information and status information for the particular hardware feature from the hardware resources table for the computer system, the location of the presence information including an access mechanism, and the location of the status information including an</p>	<p>the patent's hardware resources table recited in the preamble is equivalent to the instant data table;</p> <p>the patent's locations of at least one (first basic BIOS routine) of presence information and status information for the particular hardware feature is equivalent to the instant services number which indicates the fixed</p>

	access mechanism and a position within the access mechanism;	or dynamic entry point address; the patent's access mechanism is equivalent to the instant BIOS calling program ; the patent claim does not specifically recites the instant unique identification number ; however, this feature is deemed inherent to the patent teaching because without an unique identification number, it would not be possible to obtain/retrieve the presence and status information (unique identification) for a particular hardware feature
Determining , by a BIOS calling program , a services number of the first BIOS routine based	(c) obtaining at least one of presence information and status information for the particular hardware	

on the unique identification number from the data table	feature, the presence information being obtained using the retrieved location of the presence information, and the status information being obtained using the retrieved location of the status information; and	
	(d) performing an appropriate action fro the computer system based on the at least one of presence information and the status information obtained.	

As shown in the table, patent claim 7 appears to anticipate instant claim 1 as patent claim 7 recites all the features (or at least equivalent features with equivalent functions) of instant claim 1.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of the invention recited in instant claim 1 appears to be an obvious variant of that recited in patent claim 7.

10. Claims 2-4 and 6-8, which depend from Claims 1 and 5, respectively, are also rejected by virtue of their dependency from these base claims

Conclusion

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hoang-Vu A. Nguyen-Ba whose telephone number is (571) 272-3701. The Examiner can normally be reached on the following days of a bi-week: Monday-Thursday (first week) and Tuesday-Friday (second week) from 7:15 – 17:45.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Tuan Dam can be reached at (571) 272-3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ANTONY NGUYEN-BA
PRIMARY EXAMINER

Art Unit 2192

February 19, 2006